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The Changing Transportation Environment of the Canadian Mineral Industry

IAIN WALLACE

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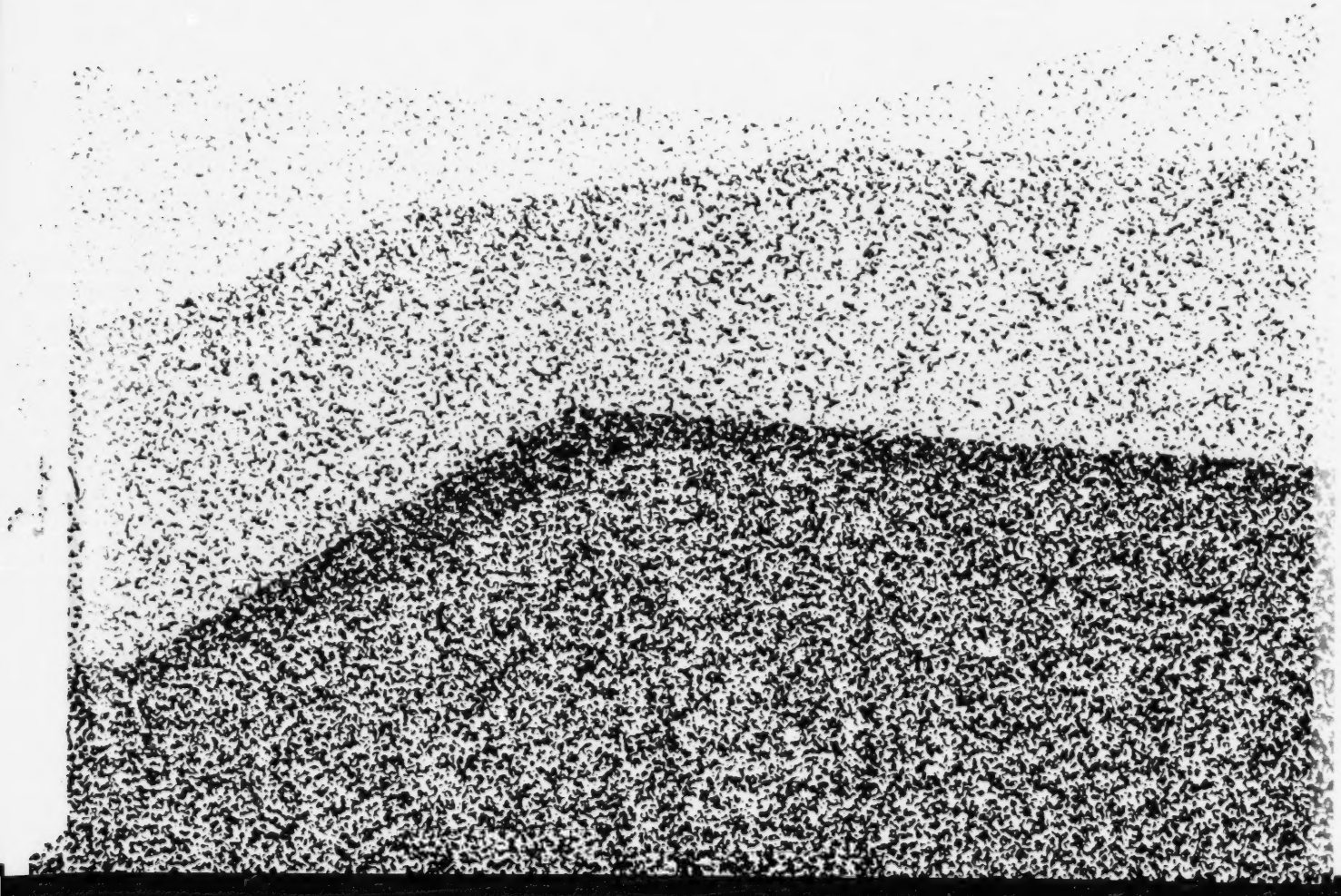

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Preface

This paper represents research supported by the Centre for Resource Studies aimed at improving the understanding of the conditions and issues facing the Canadian mineral industry, in order to assist in formulating policy decisions in industry and government. The Centre's working papers are offered for information and discussion, in an attempt to encourage feedback to the authors and additional research in mineral policy. Opinions presented are those of the author, and do not necessarily represent the views of the Centre or its sponsors.

Margot J. Wojciechowski
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Foreword

This study of the significance of changes in the transportation environment of Canadian mineral shippers has been prepared contemporaneously with the somewhat disrupted emergence of the 1987 National Transportation Act (Bill C-18) through the legislative process. The manuscript reflects the provisions of the legislation but necessarily not the direction in which those parts calling for continued regulatory intervention will be applied. No attempt has been made to address specifically the implications of the proposed free-trade agreement between Canada and the United States which was announced after the current analysis had been completed.

In addition to the references cited, I have drawn extensively on interviews with shippers and carriers across Canada and with government agencies in Canada and the United States. Sandi Guptill and Mary Taylor have provided research assistance, but I am solely responsible for the interpretations contained in this document.

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1. INTRODUCTION

Developments in the world economy in the 1980s have created a turbulent environment for the Canadian mineral industry. Structural changes in the relationship between economic growth and mineral demand, compounded by a severe global recession at the start of the decade, have resulted in slacker markets for most commodities. Canada's comparative advantage as a mineral producer has been adversely affected by significant additions to worldwide resource availability, compounded by the pricing and output behaviour of some Third World exporters. Historically depressed prices for many metals and severe price competition in other mineral markets have forced Canadian producers to ensure survival through significant productivity improvements, closure of marginal operations and other economies. Transportation costs have come under closer scrutiny as part of this broader stock-taking.

Against the background of slower economic growth in major western nations, political sentiment has favoured a reduction of government intervention in domestic economic activity. Resultant legislation has naturally had greatest impact on sectors, such as transportation, that are traditionally most subject to state regulation. In Canada, transportation policy (especially railway policy) has long been seen as a nation-forming instrument. Even today, the traditional ideology, that regional development problems are particularly amenable to transportation policy solutions, retains considerable political salience.[1] Yet the passage of a new National Transportation Act in 1987 (and related legislation specific to the trucking and shipping industries), following the historic changes embodied in the Western Grain Transportation Act (1983), will effect a major shift in the national transportation environment. As shippers responsible for approximately half of the freight tonnage carried on Canadian railways and as major users of marine and truck transportation, Canada's mineral producers are vitally affected by these developments. This study focuses on their implications. Because similar changes in the United States have influenced both the demand for and the provisions of Canadian legislation, attention is given to relevant cross-border comparisons.

The Importance of Transportation to Canadian Mineral Producers

All producers of bulk commodities are vitally dependent on cheap and efficient transportation to reach their markets. Freight costs represent a significant proportion (in excess of 30 percent for some commodities) of the market value of Canada's leading mineral exports. The volume of shipments invariably necessitates provision of specialized transportation services, to which many producers become effectively "captive". The

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[1] Howard Darling, "Transport policy in Canada: the struggle of ideologies versus realities", in K.W. Studnicki-Gizbert, ed., Issues in Canadian Transportation Policy, Toronto: Macmillan of Canada, 1974, pp. 3-46.

sustained growth of the Canadian mining industry between 1950 and 1975 was associated with considerable expansion of the national transportation infrastructure, both geographically and in terms of its carrying capacity.[2] In southern Canada, the emphasis was on increasing the capacity of delivery systems to move minerals and other bulk commodities to export markets. Opening of the St. Lawrence Seaway, construction of bulk terminals such as Roberts Bank and adoption of new technologies and operating systems (such as unit trains) were elements of this process. In northern Canada, geographical expansion of the transportation network played a proportionately much greater role. Construction of "roads to resources", notably in the Yukon, and of hundreds of kilometers of resource railways (for example, to Schefferville, Matagami, Lynn Lake and Pine Point) made possible the opening of many new mines. Increasing technological competence in arctic navigation made it commercially attractive to develop such properties as Nanisivik and Polaris.

In the changed world mineral markets of the 1980s, Canadian mining companies have been forced to review closely the viability of marginal operations. Although, because of the higher production and shipping costs which they face, remote producers have invariably worked comparatively rich deposits, the burden of these costs and the declining ore grades of many of the postwar- boom generation of mines has put northern mines particularly at risk. Mine closures, effected or impending, have been recorded recently in all the regions served by resource railways. Loss of mineral traffic threatens the future of these lines, whose closure would significantly diminish the prospects of renewed mining activity (other than for gold) along their routes in future years. Potential reductions in government support to coastal and arctic shipping could have similar implications.

Accessibility to efficient bulk transportation is of major concern in frontier regions. But throughout Canada, the changing economics of product movement associated with new legislation and contemporary changes in the structure of the transportation industry are critically important to mineral producers. By virtue of their location with respect to their principal markets, many Canadian mines face greater shipping distances, and hence greater costs, than their international competitors. In this context, the experience of transportation deregulation in the United States, particularly on the railways since the Staggers Act (1980), has demonstrated a potential for cost reductions which it is widely believed can be replicated in Canada. The validity of such expectations is addressed below.

Over the past 20 years, Canadian mineral shippers have been the beneficiaries of technological and regulatory improvements in domestic transportation productivity. Impending changes in transportation legislation present them with challenges and opportunities. Potential savings in transportation costs may require innovative reorganisation of shipments. Greater use of multi-modal systems is likely to result from the emergence of more flexible trucking operations and a more rationalised network of specialised rail

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[2] Iain Wallace, The Transportation Impact of the Canadian Mining Industry, Kingston: Centre for Resource Studies, 1977.

freight services. The costs of reaching distant markets will continue to be a factor in the viability of many Canadian mines, but domestic producers are likely to enjoy more efficient and competitive transportation service in a deregulated environment than they do now. Nevertheless, due attention needs to be given to the ways in which Canadian experience is likely to differ from that of the United States.

The bottom line for most Canadian mineral producers is that over the past few years they have significantly reduced their break-even production costs, but their transportation costs have continued to rise. The promise of reduced shipping costs is now more critical than ever.

The Context of Regulatory Change in the Transportation Sector

Prior to the 1967 National Transportation Act (NTA), Canadian transportation legislation was framed on the assumption that railways were the principal, and potentially monopolistic, mode of surface transport. Railroads in the United States were regulated under a similar presupposition, which meant that rail transportation operations on each side of, and across, the border took place in an effectively uniform environment. After 1967, Canadian railways enjoyed considerably greater commercial freedom, exemplified by the rapid growth of traffic moving under agreed charges in place of class or commodity rates. Improved productivity, resulting from such innovations as unit train operations, together with more market-sensitive pricing policies, allowed Canadian railways to offer shippers a service that was significantly more efficient than that prevailing in the United States.

The transformation of the regulatory environment of the U.S. rail system by the Staggers Act (1980) was much more radical than that achieved by the NTA in Canada. Not only were the railroads given even greater commercial freedom, in particular to negotiate confidential contracts with individual shippers, mergers were encouraged as a means to establishing profitable "mega-carriers" (of a size comparable to Canada's two transcontinental systems). Cross-border comparisons of rail productivity moved in favour of the large new U.S. systems, as they shed unremunerative routes and services and developed their intrinsic advantages of greater traffic density than the major Canadian carriers. At the same time, the movement of cross-border traffic became subject to greater uncertainties as a result of a direct conflict between the Canadian and US law governing the practice of international rate-making by Canadian railways. Overall, the significance of the changed regulatory environment in the United States for Canadian shippers and carriers was such as to generate specific policy changes in Canada. With the advent of a Conservative administration in Ottawa committed to regulatory reform, response to specific U.S. transportation initiatives became submerged in the broader policy review which led to the publication of Freedom to Move[3] and the tabling of a new national transportation act (Bill C-126 C-18) in 1986 87.

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[3] Transport Canada. Freedom to Move: A Framework for Transportation Reform. Ottawa, 1985.

The thrust of the 1967 National Transportation Act was to release Canadian railways from obsolete limitations on their commercial flexibility and to rely on intermodal competition to restrain rail rate increases. While benefitting the mineral industry along with other shippers, the Act had two specific weaknesses from the perspective of non-agricultural bulk commodity customers. It perpetuated, at the railways' expense, the Crowsnest Rate subsidy to export grain movements, and it provided little effective recourse to the "captive shipper". The consequences of maintaining the Crow subsidy were to put upward pressure on rail rates, particularly of commodities (such as minerals) least exposed to intermodal competition, and to limit the railways' investment in infrastructure, with negative impacts on the growing volume of mineral export shipments in western Canada. Some captive shippers, particularly in western Canada, sought relief in economically viable trucking options, including road haulage to a US railhead. For the majority, however, significant cost relief awaited the promise of a new regulatory environment.

The railways' escalating losses on grain traffic were finally ended in 1983, with the passage of the Western Grain Transportation Act. But with the carriers' most pressing case for revised legislation to ensure adequate operating revenues having thus been met, the new federal government felt able to embark on regulatory reform giving priority to shippers' interests. Hence the thrust of Freedom to Move and of subsequent legislation has been to foster increased reliance on market forces to shape the demand for transportation. There is less guarantee of equivalent freedom from (potential) regulatory intervention in its supply, particularly on the railways. As a result, CN and CP Rail, while accepting the overall thrust of the government's policy, fear that the infrastructure and service rationalisation which they see as necessary in a less regulated transportation environment requires a level of political commitment which has still to be demonstrated.

2. THE PROMISE OF REGULATORY REFORM FOR THE TRANSPORTATION OF CANADIAN MINERALS

Policy Principles

The thrust of the federal government's proposals for regulatory reform in the transportation sector, as set out in Freedom to Move, was to put greater reliance on market forces to determine the shape of the industry, and to retain a residual regulatory function that is "open, accessible, and not excessively costly or time consuming". The transportation sector (with a few exceptions, notably in the north) was characterized as no longer immature: carriers, therefore, are no longer in need of protection. It was recognised that there continue to be transportation services which, though not economically viable, satisfy a broader public interest, and the government's position on these was that users should "bear their fair share of costs".

The effective implementation of a new transportation regime characterised by consistent dependence on market forces is clouded by two politically-charged uncertainties. These involve regional economic development and the cost recovery of government expenditures in support of commercial transportation services. The declaration of national transportation policy which forms the preamble to Bill C-18 renews the hallowed Canadian tradition of identifying transportation as "a key to regional economic development" (Sect. 3 (1) (d)). There are numerous precedents which suggest that such a statement can serve to justify a wide range of legislated interventions, at the carriers' expense (wholly or in part), to override market forces in protection of perceived regional interests. The second issue has been most directly raised by Bill C-75, in which the government proposed to institute charges "for the purpose of defraying the cost of services provided by the Canadian Coast Guard" such as ice- breaking and aids to navigation. Vociferous opposition from marine carriers and other affected parties resulted in the relevant section (Section 4) being dropped when the bill was reintroduced in January 1987. Acceptance of the principle that cost recovery from users is appropriate in many areas of traditional government activity, the scope (and cost) of which has mushroomed in recent decades, still leaves the question of what criteria should govern its implementation unresolved. Until the government's approach to these two issues is clarified in practice, the uncertainties to which they give rise will inhibit a full response to more competitive market conditions by shippers and carriers alike.

Confidential Contracts

Bill C-18 opens the way for Canadian railways to negotiate confidential contracts with a shipper and to grant rebates or allowances as part of the agreement. This freedom will extend to all traffic, domestic and trans-border. There will be no course to appeal the terms of a confidential contract unless all the parties to it consent (Sect. 120). However,

Sect. 60 (d) implies that the terms of a confidential contract could become the focus of a regulatory investigation initiated by a third party as being potentially against the public interest. It empowers the National Transportation Agency (a pared-down successor to the Canadian Transportation Commission) to enquire:

> whether an existing confidential contract with another shipper for transportation of a substantially similar product under substantially similar conditions creates an unfair disadvantage by providing a lower freight rate or better shipping conditions that cannot be justified by any cost or efficiency factor.

Until the application of this subsection is tested in the courts, the confidentiality of contracted rates will be suspect. Whether this will have a seriously inhibiting effect on the terms of such contracts and on the innovative shipping agreements that they may potentially foster remains to be seen. Canadian railways are already parties to transborder contracts in which the US leg is covered by a confidential agreement. A particular concern of the carriers is that a low rate which they might be able to offer a particular shipper, for movement of a defined volume of traffic which utilises spare capacity, could subsequently be discovered and claimed by a comparable shipper, the marginal costs of whose traffic would be substantially higher.

Competitive Line Rates

Bill C-18 (Sect. 134 et seq.) addresses the position of a shipper who is captive to a single railway (as most mines in Canada are) by creating the option of a Competitive Line Rate (CLR). This provision is intended to increase the shipper's bargaining power by requiring the "local carrier" (serving the shipper), on request, to quote a rate involving a "connecting" (non-local) carrier for a movement where this is feasible, even if the local carrier could provide point-to-point movement over its own network ("single line" shipment) itself. For example, a coalmine in southeastern British Columbia, captive to CP Rail, could request a CLR to Vancouver involving movement by CN beyond Kamloops. The benefit of this option clearly varies regionally as a function of the alternative routing possibilities inherent in the railway network. Given the pattern of dominant mine-to- smelter flows in Canada, there is limited scope for CLRs to be applied to the movement of concentrates. Mineral processors are expected to find more scope for using the threat of a CLR in the shipment of metals. Obviously, it is inherently unlikely that significant volumes of traffic will move under this provision unless the distance of shipment is significantly reduced as a result. The interest of the "local" carrier must be presumed to lie in agreeing on an acceptable single-line (end-to-end) tariff with the shipper wherever feasible.

Interswitching and Terminal Running Rights

It is established practice on North American railways for one company to deliver railcars for line haul by another from points within the vicinity of a designated point of interchange between their respective networks. These interswitching rights currently extend to a radius of 4 miles. As a means to increase intramodal competition for linehaul traffic (and thereby reduce the extent to which shippers are captive to a single carrier), Bill C-18 proposes to extend interswitching limits to 30 km. In addition, the legislation would introduce Terminal Running Rights (TRR), permitting one company to access a shipper over the track of another within 50 km of an intersection of their networks.

These proposals are a source of serious concern to Canadian railways for a variety of reasons. They also raise broader policy questions because of the uneven sectoral and regional distribution of benefits to shippers which they might deliver. The railways' fundamental arguments are that the return on investment in existing or new trackage, which would normally be secured through the rates charged on traffic using it, could, under these conditions, be creamed off by a competitor. The risk of receiving future requests for TRR will inhibit investment in new track. The legislated remuneration for the exercise of TRR will be insufficient to recoup the direct and indirect revenue loss to the carrier whose route is used. These implications are particularly ominous for a small railway company whose baseload traffic might all but disappear at the hands of a connecting carrier. For example, outbound shipments from the network of the Algoma Central Railway could conceivably be captured by CP Rail under these regulations.

The regional and sectoral impact of extended interswitching limits and TRR is uneven because of the geography of the national railway network. Regions where one carrier is dominant have fewer points of interchange than those in which two or more carriers have trackage. Hence, for instance, The Trade and Transportation Group calculated that an increase in switching limits from 4 miles to 20 miles would increase the percentage of "competitive sidings" in Ontario from 66 to 94 and in Western Canada from 43 to 80, but in Quebec only from 47 to 59 and in Atlantic Canada only from 7 to 13.[4] Heightened intramodal competition will hence be concentrated principally in the urban and manufacturing regions of Central Canada (its potential increase on the Prairies would be realised only if grain traffic were to be deregulated). In contrast, resource industries in more remote parts of the country stand to gain little benefit from these provisions. Most mines and many smelters are beyond 50 km of a network interchange, so the proposed competitive line rate is the only basis for introducing intramodal competition into their traffic flows.

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[4] The Trade and Transportation Group, "A Study of Competitive Joint Line Rates", Ottawa, March 1986, p. 11.

Cost Deregulation and Service Rationalization

The freedom which Bill C-18 promises to railways to adjust their costs of operation is considerably more restricted than that which will govern their pricing of services. In particular, rail carriers are required to maintain their common carrier obligations and will continue to require regulatory approval for the abandonment of service along any branch of their network. The latter process is open to appeal by any affected party and must take into account "the public interest". The criteria deemed relevant to a decision include (Sect. 167):

> (b) the alternative transportation facilities available or likely to be available in the area served by the branch line,
>
> (f) the probable effect on other lines and other carriers and on the transportation system generally,
>
> (j) the existing and potential resources of the area served by the branch line...seasonal restrictions on other forms of transportation in the area and the probable future transportation needs of the area.

These considerations are most likely to be invoked in frontier regions, where mineral or prospective mineral shipments constitute the bulk of the traffic on offer. Whereas they may protect the captive shipper from loss of a service that has become uneconomic, the imposition of unremunerative traffic on rail carriers can only hinder their efforts to offer efficient and competitive service to shippers at large, including other mineral producers.

However, Sect. 158 explicitly offers railways an alternative to requesting abandonment of service by providing for a change of ownership of a branch line. The party purchasing or leasing the route would assume the statutory obligations governing its operation and could only abandon service by going through the prescribed regulatory process. The intent of this proposal is undoubtedly to foster the transference of local branches or networks from CN and CP Rail to other carriers who are presumed to enjoy lower costs and more flexible operating conditions. The purchaser could be a locally-based "short line" railway or the principal shipper (e.g. a mine) over the route in question. Many short line railroads have come into being in the United States since the passage of the Staggers Act and the relevance of their experience to Canada is addressed below. The attitude of CN and CP Rail towards short-line railway development is likely to be positive, in that it offers them a means of rationalizing their networks without necessarily precipitating the widespread loss of service which would otherwise ensue (and, given the persistence of "railway ideology", provoke political intervention).

3. THE RELEVANCE OF DEREGULATORY EXPERIENCE IN THE UNITED STATES

The discussions in Canada which led up to the passage of the new National Transportation Act were shaped by observation of the consequences of comparable legislation in the United States. Many Canadian shippers had felt the benefit of the Staggers Act, notably its provision for confidential contracts which reduced their shipping costs. At the same time, CP Rail and CN had experienced various negative consequences (e.g., cancellation of joint rates over specific international routes) resulting from the new freedoms of U.S. railroads to rationalize their operations. The Canadian railways' ambivalence about proposals to extend Staggers- style deregulation north of the border stemmed partly from their greater sensitivity than most Canadian shippers to the differences between the objectives of the Staggers Act and those of Freedom to Move and the legislation which has flowed from it. In brief, the goal of U.S. legislation had been to foster a financially more secure and operationally more flexible railroad network, from which shipper benefits were expected to flow. In Canada, the expansion of shipper options and reduction of their costs was the government's primary concern, and the ability of carriers to maintain profitability in this new environment was assumed.

The Staggers Act, and its precursor, the Railroad Revitalization and Regulatory Reform Act (1976), were prompted as much by the urgent need to reverse the deterioration of US railroad finances and services as by a commitment to deregulation in principle. In 1980, nearly one quarter of the railroad network of the United States was subject to bankruptcy reorganization and 77,000 km of track were subject to speed restrictions for lack of adequate maintenance.[5] As a result, the need for railroads to earn "adequate" revenues was an underlying criterion for many of the detailed provisions of the legislation, and the "reasonableness" of disputed rates was to be determined on cost-related grounds. Conversely, railroads were granted considerable freedom to implement cost-reducing measures.

Post-Staggers reorganization of U.S. railroads has resulted in the emergence of six "megacarriers", whose networks are comparable in extent to those of CN and CP Rail. The mergers which have created these systems have also involved divestment of duplicate or unremunerative routes. One result of this process has been the emergence of nearly two hundred "short line railroads", frequently formed by local interests to continue and develop traffic on low- density branchlines whose revenue cost ratios did not meet the increasingly stringent criteria of their former owners. Between the megacarriers and the short line railroads there are a number of "intermediate" (multi-state) and "regional" carriers serving geographical niche markets: the U.S. subsidiaries of CN and CP Rail fall

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[5] John Riley, Testimony before the Subcommittee on Transportation, Tourism, and Hazardous Materials, Committee on Energy and Commerce, Washington, May 28, 1987.

into this group.[6] Note that there are very few such networks in Canada, principally BC Rail and Ontario Northland.

Differences between the Canadian and U.S. railway industries, involving both operating conditions and geographical configurations, need to be acknowledged when assessing the possible consequences of the new National Transportation Act. The following points are particularly relevant.

1) CN and CP Rail dominate the Canadian market with essentially parallel transcontinental routes. They offer competitive service between most major cities (although many shippers would characterize the market as a cosy duopoly). Where either carrier enjoys a regional monopoly (as CN does in northern mining areas and CP Rail does in southeastern British Columbia), it does so on the basis of a sparse route network carrying traffic generated at very few nodes. In contrast, the networks of the US megacarriers have created some extensive regional monopolies, not least in border states, where Burlington Northern in the west and Conrail in the east receive much Canadian traffic.

2) The overall traffic density of the major U.S. railroad systems is greater than that of CN and CP Rail, giving them lower fixed costs per traffic unit. This reflects international differentials in the geographical density of population and economic activity, compounded by the extensive rationalization of surplus plant achieved by the US carriers. An important dimension of the traffic differential is the contrast in coal movements between Canada and the United States. Coal constitutes approximately 17 percent of rail freight tonnage in Canada, or 28.6 million t (1984), most of which is export traffic from mines in Alberta and British Columbia concentrated on the routes connecting them to Vancouver and Prince Rupert. In the United States, coal represents approximately 40 percent of rail freight tonnage, or 538 million t (1985), most of which is for domestic consumption, involving a widely dispersed pattern of movements.[7] Coal shipments are, significantly, about the only set of traffic flows of a magnitude and stability (covered by contracts of up to 30 years) to justify major new investment in competitively- motivated track construction. This they have done in the Powder River Basin, Wyoming, where the Interstate Commerce Commission endorsed the right of entry of the Chicago and North Western, by means of a 320 km route, into a coal basin previously monopolised by the Burlington Northern.[8] Citing this case, the Chairman of the ICC has argued that in encouraging competitive market entry by a rail carrier, the Staggers Act envisages "new [route] construction" as "the principal vehicle": its authors "did not have as their primary

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6 Harry Bruce, America's new railroads: "We're not just merging--we're emerging", Progressive Railroading, January 1987, pp. 25-29.

7 Coal Association of Canada, Response to Bill C-13 An Act respecting national transportation, Calgary, March 3, 1987; and "Coal...Railroads ride the crest", Progressive Railroading, June 1986, pp. 32-38.

8 "C&NW get the coal", Progressive Railroading, June 1986, pp. 44-47.

focus switching, trackage rights, or joint rate access".[9] Note that the new National Transportation Act puts its full weight behind these latter mechanisms in the absence of serious prospects for competitive construction in Canada.

3) The creation of new short line railroads in the United States has not prevented the permanent abandonment of lightly-used routes. In nearly every case, operations have been maintained only where traffic levels have been sufficient to promise new owners an adequate return. Improved financial performance has been achieved by managers actively stimulating demand from within the local business community and by their introduction of less costly staffing levels and work practices. (Freedom from federal regulatory requirements and from previous railroad system-wide labour agreements have been significant sources of saving.) Most short line routes handle mainly bulk traffic, acting as low cost feeders to the major railroads.[10] Of the few short lines that currently exist in Canada, some are of this nature, including those primarily oriented to mineral shipments, such as the Asbestos and Danville. However, it would be dangerous to infer from the viability of these lines of a few kilometres' length that long stretches of track serving frontier mines could survive as short line railways if their traffic was such that CN (primarily) sought to abandon them.

4) The new "regional" railroads that have emerged in the United States have been a testbed for innovations in working practices which have dramatically improved labour productivity. Most of these have been achieved within a unionised environment, so the issue is not one of organised versus non-union labour per se. Rather, it has been a question of making a clean break with practices perpetuated from an earlier era.[11] Pressure to extend these changes throughout the U.S. railroad industry is growing, and the consequences of their adoption by the megacarriers would be far-reaching. The labour climate within the Canadian railway industry, as measured by the national strike action in August 1987, suggests that comparable productivity improvements are not an immediate prospect in this country. Yet the ability of CN and CP Rail to adapt successfully to the more competitive transportation market promised in the new National Transportation Act depends substantially on such measures. An experimental short line in Alberta, the Central Western Railway Corp., created in 1986 out of a grain-oriented CN subdivision, has been required by the Canadian Labour Relations Board to maintain existing union

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9 Heather Gradison, "Reality over rhetoric": Remarks of the Chairman of the Interstate Commerce Commission to the National Industrial Transportation League. Washington. February 20, 1987.

10 "Focus on Short Lines and Regionals", Progressive Railroading, September 1986, pp. 50-54.

11 Harry Bruce, America's new railroads: "We're not just merging --we're emerging", Progressive Railroading.

rights.[12] If the extensive network pruning planned by CN and CP Rail is to lead to the emergence of viable "regional" railroads, adoption of the more flexible labour practices gaining acceptance in the United States will be necessary in this country also.

Any comparison of the new National Transportation Act's impact on Canadian railways with that of the Staggers Act on railroads in the USA has to recognize that, until 1980, Canadian carriers and their customers enjoyed greater commercial freedom and greater productivity than American counterparts. The benefits of Staggers, in other words, have to some extent been experienced in this country for the past twenty years. Nevertheless, there are freedoms now available to U.S. railroads to tailor their services to the available traffic that give them greater flexibility in responding to changing markets than is promised in the new NTA. These partly reflect the different contexts into which legislation was introduced in the two countries, with the urgent need to restore the profitability of carriers given prominence in the United States and the discontent of shippers with the limited competition of a regulated duopoly most prominent in Canada.

Restructuring of the United States railroad network into a regionalized mosaic of megacarriers augmented by a variety of smaller lines has served most interests well. Trunk carriers have been able to concentrate their investment to provide high-quality service over densely-trafficked routes, at lower cost to nearly all shippers. Local and regional markets have benefitted from the decentralised and lower-cost operations of short line and regional carriers. Even "captive" shippers, represented most often by suppliers of coal to electric utilities, have for the most part shared in the greater efficiency and competitiveness of a substantially deregulated industry. Despite this, some captive shippers are calling for revisions to the post-Staggers regime.[13] The lobby group, Consumers United for Rail Equality, seeks to impose competitive access provisions almost identical to those embodied in the Canadian legislation (mandated joint rates, terminal running rights, etc.). The potential benefit of such regulation is much less obvious within the geographically complex (and hence more competitive) railroad network of the United States than it is within Canada, where long- distance shippers do have very limited options. Undoubtedly, the revision of traditional work rules has been one of the most significant forms of cost-containment associated with the restructuring of the U.S. rail system under Staggers and it is critical that comparable labour productivity improvements be negotiated by Canadian carriers in adjusting to the new NTA.

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[12] The Financial Post 11 May 1987.

[13] Mike Wujcik, "Competitive access backers off-base", Progressive Railroading, May 1987, p. 26.

4. RESPONSES TO THE PROPOSED NEW TRANSPORTATION ACT IN CANADA

Nearly all Canadian shippers who made formal responses to Bill C-18 supported its provisions as being consistent with the pro-market thrust of Freedom to Move. The Mining Association of Canada, for instance, suggested no more than a "few wording changes", principally to ensure a strong reading of the provisions for Competitive Line Rates.[14] The Coal Association of Canada was equally satisfied with the proposed legislation, although its brief was more explicitly sensitive to the railways' need for adequate revenue and their concerns about the implementation of the terminal running rights provision.[15] Stelco expressed a pervasive sentiment, however, in arguing that "support for the legislation...is not contingent upon solving all these problems [identified by the railways] simultaneously".[16] It is noteworthy that one of the largest "captive" shippers, Westar Mining Ltd., the export coal producer, voiced concern that the Final Offer Arbitration and Competitive Line Rate provisions not be interpreted too liberally. Unless they are confined to "truly" captive situations, with no realistic intermodal or intramodal competition, Westar argued that their invocation "will result in undue rate pressure on those shippers who are truly captive".[17] Yet sufficient evidence of the exploitation of captive shippers, most notably in the chemicals industry, had been presented to Parliament to clearly justify the specifically legislated pro-competitive measures.[18]

Canadian shippers with wide experience of cross-border traffic flows regularly cited the favourable impact of the Staggers Act in their response to Bill C-18. Stelco estimated it had saved $35 million since 1983 on traffic moving under confidential contracts (in comparison to the equivalent published tariffs), and this despite being a small shipper

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[14] Mining Association of Canada, Submission to the Standing Committee on Transportation concerning Bill C-18 An Act Respecting National Transportation Bill C-19 An Act Respecting Motor Vehicle Transport by Extra-Provincial Undertakings. Ottawa, March 12, 1987, p. 4.

[15] Coal Association of Canada, Response to Bill C-18 An Act respecting national transportation, Calgary, March 3 1987

[16] Stelco, Submission to the Standing Committee on Transport on Bill C-18, "The National Transportation Act 1986" and Bill C-19 "The Motor Vehicle Transport Act 1986", Ottawa, March 9, 1987, p. 7

[17] Westar, Submission by Westar Mining Ltd. to the House of Commons Standing Committee on Transportation Bill C-18 An Act Respecting National Transportation, Ottawa, March 1987, p. 3.

[18] Canadian Industrial Traffice League, Supplementary Submission of Canadian Industrial Transportation League to Standing Committee on Transport: Rebuttal of CP and CN Rail Submission, Ottawa, April 1, 1987, and Financial Post, 11 May 1987

within the US market, with little leverage.[19] The ability to request a competitive line rate on transcontinental shipments which opens the longhaul portion to competition between a U.S. and a Canadian carrier is particularly attractive to some near-border shippers.

Carrier response to the new Act has been to stress that its promise of lower charges for shippers comes at the expense of a potentially serious shortfall in carrier revenues. Claims by CN and CP Rail that they stand to lose $1 billion apiece over the first five years of the new regime have been dismissed as grossly exaggerated by shipper groups and independent consultants. But given the market outlook for the railways' major bulk commodities and the increased competition which a less regulated trucking industry will provide for their general freight, the pressure on railway earnings will be appreciable. Hence cost reduction is a necessity, and both CN and CP Rail have indicated that they see many components of their current networks as candidates for closure. The 1986 CN Annual Report claims that 90 percent of rail revenue comes from 33 percent of the corporation's trackage, and 54 percent of CP Rail's network carries only 3 percent of its traffic.[20] Lightly used lines in remote regions, for which closure is likely to be sought early, are not promising candidates for reinvigoration under a short-line regime. Some of the examples discussed in the following chapter illustrate the degree to which direct government intervention has been necessary to retain, for the time being, service on routes of significance to mineral producers, or to make alternative transportation viable.

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[19] Stelco, Submission to the Standing Committee on Transport on Bill C-18 "The National Transportation Act 1986" and Bill C-19 "The Motor Vehicle Transport Act 1986".

[20] CP Rail, House of Commons Standing Committee on Transport: CP Rail Submission on Bill C-18, Ottawa, March 1987, p. 72.

5. RECENT DEVELOPMENTS IN CANADIAN MINERAL TRANSPORTATION

The dynamic trends in international mineral markets and developments in the North American transportation sector in the 1980s have required Canadian mineral shippers and carriers to respond continuously within the prevailing regulatory environment. The more competitive pricing regime promised to shippers by the new National Transportation Act has in many cases already come about through normal commercial considerations. In particular, mineral producers have been able to negotiate freight rate freezes or roll-backs on the basis of severe market pressures mutually recognised by themselves and the railways. Some shippers have taken advantage of lower rail transportation costs in the United States, despite the inability or reluctance of Canadian carriers to match the rates, by reorganising their distribution arrangements. Others have shown greater willingness to experiment with domestic waterborne movement of concentrates to provide leverage in contract negotiations with the railways. Clearly, mineral producers and their carriers have to some extent anticipated the new Canadian transportation legislation in order to tackle the urgent pressures facing them. Nevertheless, the range of possibilities for innovative action will not be fully clear until the new Act takes effect. Some examples of recent adjustments and prospective reorganizations of transportation arrangements are reviewed below.

Lead/Zinc Transportation in the Yukon

The Cyprus Anvil lead zinc mine at Faro, Yukon Territory, ceased operations in 1982 in the face of weak markets and high transportation costs. Loss of 80 percent of its tonnage and half its revenue precipitated the closure of the White Pass and Yukon Railway (WPYR), which had conveyed concentrates from Whitehorse to the port of Skagway, Alaska. The severe impact which these developments had on the territorial economy prompted active federal (and territorial) efforts to have the mine reopened. The prospects for a viable resumption of mineral production hinged substantially on a resolution of the mine's transportation needs. The successor company to Cyprus Anvil, Curragh Resources, insisted on a cheaper form of shipment than the truck rail movement of ore containers which had prevailed up to 1982.

Curragh sought government assistance to make possible a direct truck haul from Faro to Skagway via the South Klondike Highway. This required new road construction and a commitment to all-weather maintenance of a route which had previously been open seasonally for light traffic only. The advantages of an all-truck movement over the truck/rail combination include lower rates (a 40 percent reduction), a very much faster trip (12 hours one-way versus up to two weeks) and a reduction in the volume of concentrate lost in transit from 5 - 7 percent to less than 1 percent. The WPYR has now closed permanently as a freight route (although it may reopen as a tourist attraction). Curragh's

new arrangement shifts maintenance costs from the private (rail) to the public (road) sector. The territorial government agreed to keep the road open for ten years, defraying its expenses through fuel taxes and a $1 per tonne levy on concentrate shipped along the highway. Curragh subsequently signed a seven-year trucking contract (worth $150 million) with Yukon-Alaska Transport Ltd. Initially, truck loads had to be split in half at the Alaska border because of lower maximum weight limits in the state than in the Yukon. The trucking company is funding the upgrading necessary to permit fully-laden trucks to operate into Skagway.

Iron Ore Transportation in Labrador

In 1982 the Iron Ore Company of Canada closed its mine at Schefferville, Quebec and withdrew from the townsite, leaving a predominantly native population of approximately one thousand. Its subsidiary, the Quebec North Shore and Labrador Railway (QNSLR), thereafter applied to the Canadian Transportation Commission (CTC) to abandon the rail line from Ross Bay Junction to Schefferville (a distance of 215 km). This was refused, and the QNSLR operates a weekly mixed passenger freight train to maintain service to the town.

As a result of the Schefferville closure and reduced shipments from mines in the Wabush Labrador City region, traffic on the QNSLR dropped from 34.5 million tonnes in 1979 to 16 million in 1983. (Iron ore shipments on the Quebec Cartier Railway declined comparably in the same period.) Efforts to reduce operating costs in recent years have involved increasing the number of cars per train and preparing to introduce cabooseless trains. An application to do this has been conditionally approved by the CTC but implementation awaits the outcome of trials with approved equipment. Removal of the caboose would yield annual savings of $180,000, but greater savings would accrue from the removal of the associated train staff ($650,000 per year), which is likely to meet with more resistance from the labour unions. It is precisely these sorts of savings which CN and CP Rail argue must be extended nationally if the carriers are to survive in the more competitive environment of the new National Transportation Act. But the extension of cabooseless operation to CN and CP Rail raises more serious public safety concerns, which in the aftermath of the enquiry into the Hinton disaster are expected to retard regulatory approval.

The Algoma Central Railway

The Algoma Central Railway (ACR) connects the Algoma Steel Company's iron ore mine at Wawa, Ont. with its steel plant at Sault Ste. Marie. (There is no corporate link between the two companies.) Iron ore shipments represent just over half the tonnage carried by the ACR. The Algoma Steel Company has been in financial difficulties since the downturn in the western Canadian economy reduced demand for its products and recently pressed for wage concessions by its unionized workforce. As part of a broader campaign

to cut operating costs, the steel company has threatened closure of the Wawa mine, whose ore currently has a higher delivered cost at the Sault than potential deliveries from U.S. sources. Were the ore traffic to cease, the ACR might well close, as its other major sources of revenue, steel and forest product shipments, could travel (albeit more indirectly) via Sudbury.

In January 1987, the Algoma Steel Company announced that it required a reduction (of approximately 40 percent) in the iron ore freight rate if the Wawa mine were to remain open. The threat that the mine and the railway might close raised sufficient political concern about the preservation of economic activity in the region that the provincial and federal governments undertook to assist the affected parties in finding a modus vivendi. Direct subsidization of the steel company's operations was ruled out because of the sensitivity of its product markets in the United States to countervailing action. The interim solution adopted in February 1987 was for the two levels of government to grant $15 million to the ACR under a tourism development agreement "to ensure the continued operation of the Agawa Canyon tour trains". This sum represents approximately three and a half times the gross annual cost to the ACR of granting the rate reduction. Even with this reprieve, the Wawa mine has a limited future, so that of the ACR remains insecure. Efforts by the parent company to hive off its rail division into a separate business unit have been delayed pending the release of financial information requested by the Canadian Transport Commission.

Other Rail Traffic

The announcement that Cominco would close the lead/zinc mine at Pine Point, NWT, from mid-1987, put the viability of the 690-km rail line built to serve the mine in doubt. Although planned shipments of stockpiled concentrates will continue for a further two years, it appears unlikely that the residual traffic will justify maintaining service thereafter. Improvements in the road network of northern Alberta during the twenty years since the route was opened have made rail shipments no longer indispensable as a means of general regional supply.

Overall, the capabilities and competitiveness of the trucking industry in western Canada offer mineral shippers increasing opportunities to replace railway branch operations, over distances which vary with the nature of the traffic. A recent 80 000 t contract for road haulage of copper concentrates from Shebandowan Ontario to Thompson Manitoba shows the potential for such developments. In Atlantic Canada, where truck competition is less effective than in the west, concerns that the rail network is threatened with substantial pruning appear to lie behind recent contract renewals between mineral shippers and CN on terms which are generally more favourable to the carrier than those obtained elsewhere. Despite disputes about rates and service between some mineral producers and the railway, the retention of rail service is currently seen as important by shippers in the region.

Marine Transportation

The principal features of the current federal transportation legislation have less bearing on the marine mode, which has been relatively unregulated. The most contentious issue, cost recovery of support services (coastguard, icebreaking, etc.), has been shelved for the time being, following widespread criticism that the relevant wording of Bill C-75 was far too vague. Proposed minor changes to existing regulation will simplify the licensing of arctic shipping. The future of the St. Lawrence Seaway, which is not directly addressed in the legislation, is currently the issue of greatest relevance to the interests of Canadian mineral producers.

The traditional patterns of traffic on the Seaway - grain and coal downstream, iron ore upstream - are unlikely to change radically. The volume and directional balance which they attained in the 1970s have not been maintained in the 1980s, however, and there is no reason to expect they will reappear. The output of an increasingly uncompetitive U.S. steel industry has declined significantly in the past decade (to 74 million t in 1985). Canadian production has been limited by slower growth in the domestic economy and increasingly protectionist sentiment in the United States. So although the lakeside states' (Illinois, Indiana, Michigan) share of U.S. output has risen, iron ore shipments through the Seaway have approximately halved from their peak of 20 million t in 1977. (The shares of ore sourcing as between Labrador and Upper Lakes mines have also changed, to the detriment of the Seaway.) Coal movements through the Welland Canal have also dropped, in response to trends in steel industry production and the fuel and generating station location policies of Ontario Hydro.

Grain traffic, in contrast, was growing rapidly in the late 1970s and early 1980s, peaking in 1983. The subsequent sharp decline, a result of major structural changes in world grain markets, has meant that both the Seaway's principal traffic streams have shrunk, with adverse consequences for the financial viability of the Seaway and the Canadian Lakes fleet. It is against this background of squeezed carrier earnings and increasingly cost-sensitive mineral shippers that federal cost- recovery proposals create concern. Seaway users successfully petitioned the government to moderate toll increases in the period following 1978, when the Seaway Authority was recapitalized and charged with breaking even. But given recent traffic trends, the predictable result has been a growing operating deficit, which prompted renewed toll increases (15 percent in 1986, 8 percent in 1987). The issue of pilotage charges within the Great Lakes waterway is even more contentious than that of Seaway tolls, for cost escalation has been steady and the necessity for Canadian laker captains (as operators familiar with navigation in the system) to utilize pilotage continues to be disputed by the carriers. The United States has moved away from toll charges on its portion of the Seaway as part of a national policy of recovering marine infrastructure and service charges through a levy on all cargo handled at US ports. The Dominion Marine Association has expressed interest in a similar regime for Canada.

6. ANALYSIS AND PROSPECTS

It is apparent that the forthcoming deregulation of transportation in Canada will be less radical than that enacted over the past decade in the United States. Transportation policy has historically been more central to issues of national identity and economic development north of the border, and the use of regulatory protection to ensure carrier viability in peripheral regions will remain in the differential provisions for air transportation in the north. In the prevailing economic and political climate, marked by slower growth and electoral dissaffection in resource-dependent hinterlands, the rationalization of rail infrastructure on the scale which is commercially appropriate may well prove politically unpalatable. In this case, the shipper benefits of more competitive pricing will not be matched by carrier benefits of a more streamlined cost structure. The result could be, in essence, a perpetuation of the Crow Rate regime, wherein railways are required to bear the costs of public policy (government indecisiveness) without adequate compensation, and necessarily seek to recover higher revenues from traffic that is more or less captive. (Only, as ever, the "captive" base will have shrunk.)

It is in the interests of the Canadian mining industry as a whole to encourage application of the new legislation in ways that maximise the freedom of carriers to exit markets and regions as well as to enter them. Obviously, some mines are going to be more directly affected than others. Few will face the prospective loss of their rail link with relish, if only because they will then become truly captive to trucking. There is considerable scope in the legislation, however, for various innovative solutions to the transportation needs of remote and/or low density shippers. These range from the creation of short line railways owned by independent carriers, shippers or regional authorities to more flexible intermodal or truck-only shipping arrangements. In the long run, these options must be extended to the western Canadian grain economy to form the basis of a fully market-driven and regionally uniform national transportation policy. Given existing legislative commitments to the Prairie branch line network, progress in this direction may be slow. Nevertheless, the major Canadian railways appear ready to negotiate competitive contracts to retain as much mineral traffic as they can over a pared-down network. Provincial highway departments are likely to be more receptive to increased heavy trucking associated with mineral shipments in remote regions than they would be in more settled areas.

The potential for traffic diversion from Canadian to U.S. carriers is less of an issue in the mineral industry than for shippers of finished products (including metals). The immediate markets of Canadian mines (smelters or export terminals) are so located that only in a few instances is competition from U.S. carriers feasible. Where it is, as in the southeastern B.C. coal industry, logistical problems (in this case the incompatibility of Canadian gondola cars with existing US terminal equipment) will limit the leverage which shippers can effectively exercise. Some potash shipments from Saskatchewan to scattered markets in the United States have, on the other hand, been rerouted to take advantage of cheaper or more flexible services offered by U.S. carriers.

Increased pressure on Canadian mineral producers' margins arising out of the reduced transportation rates available to U.S. competitors is a concern for some commodity groups (e.g. silica sand). It is pertinent to note, however, that the United States has retreated from its initial total deregulation of export coal shipments by rail, having seen the readiness with which railroads moved to capture substantially all of the economic rents available from captive producers. Currently, most of the U.S. mega-railroads do have a lower cost structure than CN and CP Rail, which is largely the result of policies of plant rationalisation and traffic concentration implemented since deregulation. Under competitive conditions these savings are shared with the shipper. The interests of adversely-affected Canadian producers will best be met by allowing Canadian carriers the same freedom to control their costs.

The market outlook for Canadian minerals in a structurally changed global economy gives no reason to expect a return of the expansionist era of the recent past. The implications of this situation are generally well understood by those substantial components of the domestic transportation industry whose revenues are directly affected. Despite the promise of the federal government's move to deregulate the transportation sector, neither the extent of what is proposed nor, one suspects, the political will to implement it consistently, appears to be sufficient to make the necessary adjustments. Those shippers with fewest options are, in these circumstances, likely to be the ones most adversely, albeit indirectly, affected.

Within a country as geographically extensive and as distinctively regionalized in economic and environmental conditions as Canada, there is much to be said for governments defining regionalized strategic objectives for transportation provision. These could provide a framework for identifying where public support for services which are not commercially viable in an unregulated transportation market are desirable. Subsidies to carriers for unremunerative operations performed "in the public interest" or public spending on infrastructure provision could then be allocated and would be transparent. Frontier resource developments might well be beneficiaries of such policies.[21] The interests of the Canadian mineral industry will not be as well served if carriers, particularly the railways, continue to be used, even in a diluted fashion, as the uncompensated agents of a regional development strategy which has no sound basis in contemporary economic conditions.

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